

Notice of Allowability

Application No.

09/863,941

Applicant(s)

KUCHERAWY, MURRAY

Examiner

Arrienne M. Lezak

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 December 2005.
2. ☒ The allowed claim(s) is/are 1-4 and 8-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>12/23/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


DAVID WILEY
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given by email on 23 December 2005, by John A. Smart, Attorney for Applicant.

The application has been amended as follows:

Claim 1:

(Please delete from lines 8-9) —“wherein the number of MTAs spawned for a given domain is determined based on run-time dynamics, and wherein”—

(Please insert at line 8) —for a given domain, wherein each queue is associated with at least one message transfer agent (MTA) processing thread that establishes a connection with a recipient MTA and at least one queue is associated with a set comprising a plurality of MTA processing threads, wherein said set of MTA processing threads is dynamically configurable for optimizing resources allocated for a given queue so that the number of MTAs spawned for a given domain—

Claims 5, 6 & 7:

PLEASE CANCEL

Claim 13:

(Please delete from line 8) –“a”–

(Please delete from line 9) –“assigning”--

(Please insert at line 8) –wherein each queue is associated with at least one, processing thread for receiving—

(Please insert at line 9) –to another system, at least one queue being associated with a plurality of processing threads that may be spawned dynamically at runtime for optimizing resources allocated for said at least one queue such that the number of threads that may be spawned for a given domain can exceed the number of available e-mail servers for that given domain, and each incoming e-mail message being assigned to a particular queue based on what domain the incoming e-mail message is destined for; and—

Claim 21:

(Please insert at line 13) –when none are available to accept work, wherein each said additional MTA is dynamically spawned for optimizing resources allocated for a given queue, and wherein the number of MTAs spawned for a given domain may exceed the number of the available e-mail servers for that given domain.—

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

After extensive searching and analysis of the best prior art in light of Applicant's claimed invention, Examiner finds that the Funk '162 patent does not disclose dynamically configurable MTA processing thread connections for e-mail delivery optimization. In other words, Funk's load balancing is statically configured up front, and thus, it does not automatically reconfigure itself based on run-time dynamics.

Examiner distinguishes US Patent US 6,779,039 B1 to Bommareddy as a load balancer requiring knowledge of the capacities of the lines it is managing as opposed to Applicant's invention which requires no such knowledge as work assignments are based upon the return rate of the courier, not the route taken.

Examiner distinguishes US Patent Pub. US 2002/0129127 A1 to Romero as being unable to dynamically create and destroy partitions, as required by Applicant's claim language.

Examiner distinguishes US Patent US 6,735,770 B1 to Yeager for using multi-threading to limit resource contention when accessing messages in a message store, as opposed to Applicant's mass-mail accelerator (MMA) invention, which is a transport-only mechanism and has no access to mailboxes or interest in message content.

Examiner distinguishes US Patent 6,148,329 to Meyer as describing a system for formatting stored messages to be sent (and resent) out via the usual e-mail methods as governed by message formatting requirements as opposed to Applicant's MMA which is unconcerned with mailboxes, message format or content-related issues. Applicant's

system is strictly a transport system, making routing and efficiency decisions at the transport levels based on the message's sender and recipient.

Examiner distinguishes co-pending Application 09/945,130 to Kucherawy comprising policy enforcement means not mentioned within application 09/863,941.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Terminal Disclaimer

The terminal disclaimer filed on 23 December 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of US Patent 6,658,454 to Delany/Kucherawy has been reviewed and is accepted. The terminal disclaimer has been recorded.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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